

ABSTRACT OF THE DISCLOSURE

An intermediate region is formed at a central portion of an element in a track width direction, and an
5 antiferromagnetic layer is not provided at the intermediate region. Accordingly, a sense current can be prevented from being shunted to the intermediate region, and as a result, improvement in reproduction output and strength against magnetic electrostatic damage can be realized. In addition,
10 since the thickness of the central portion of the element is decreased, trend toward narrower gap can be realized. Furthermore, since the direction of magnetization of a free magnetic layer is oriented in the track width direction by shape anisotropy, means for orienting the magnetization is
15 not necessary, and hence the structure and manufacturing method of the element can be simplified.